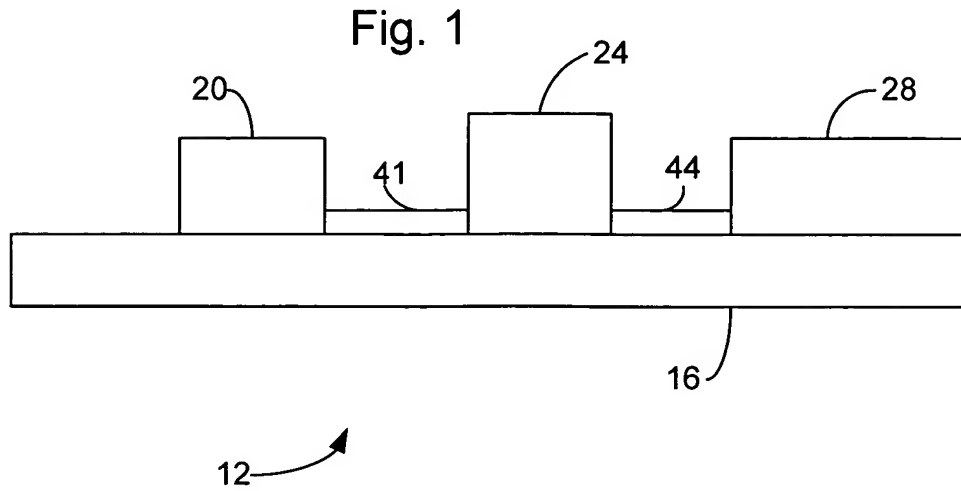
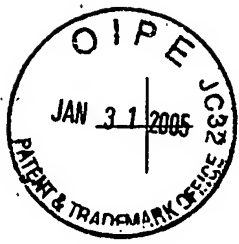




Title: TUNABLE LOW NOISE AMPLIFIER  
Inventor(s): TONCICH, Stanley S. et al.  
Application No.: 10/075,727 Date Filed: February 12, 2002  
Attorney Docket No.: UTL 00145





## Single Band Power Amplifier Matching Circuit

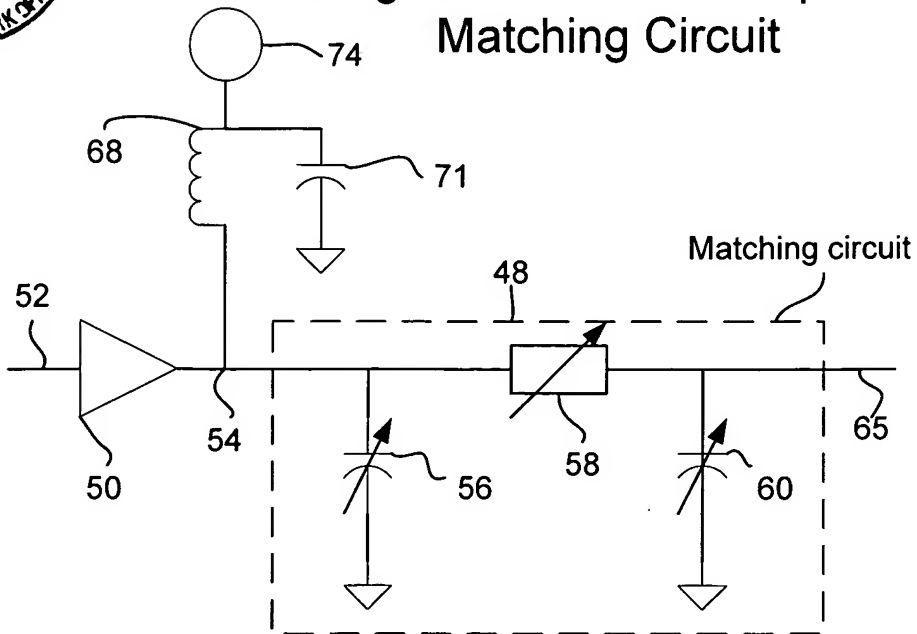
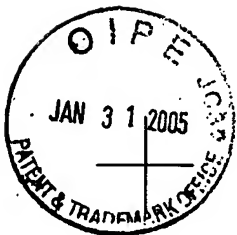


Fig. 2





## Single Band Power Amplifier Matching Circuit

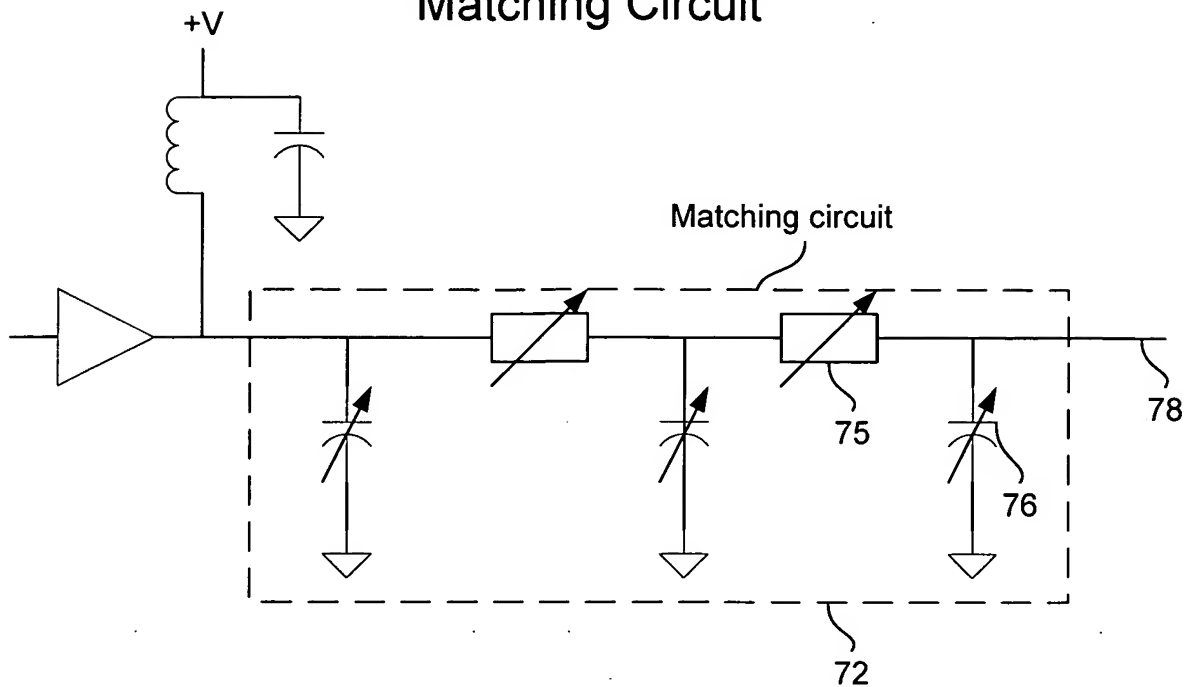
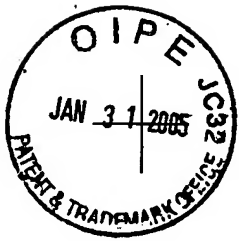


Fig. 3





## Multiband Power Amplifier Matching Circuit

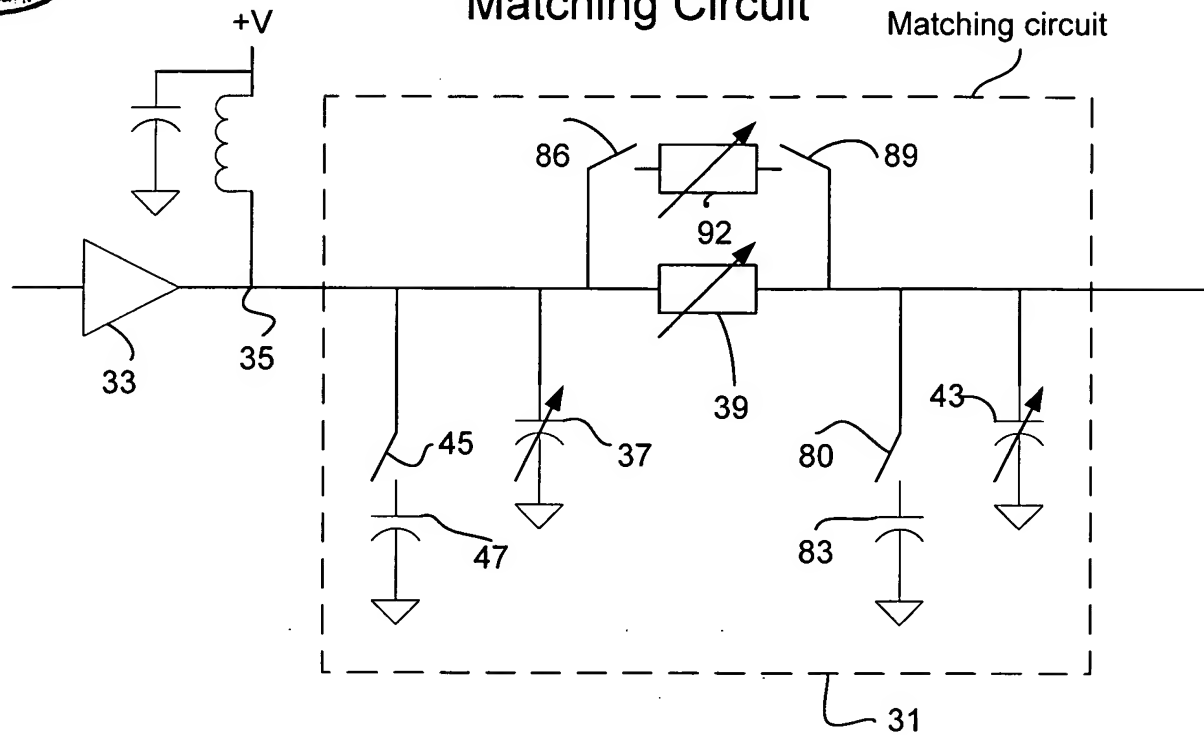
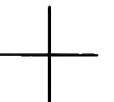


Fig. 4A



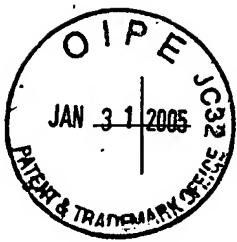
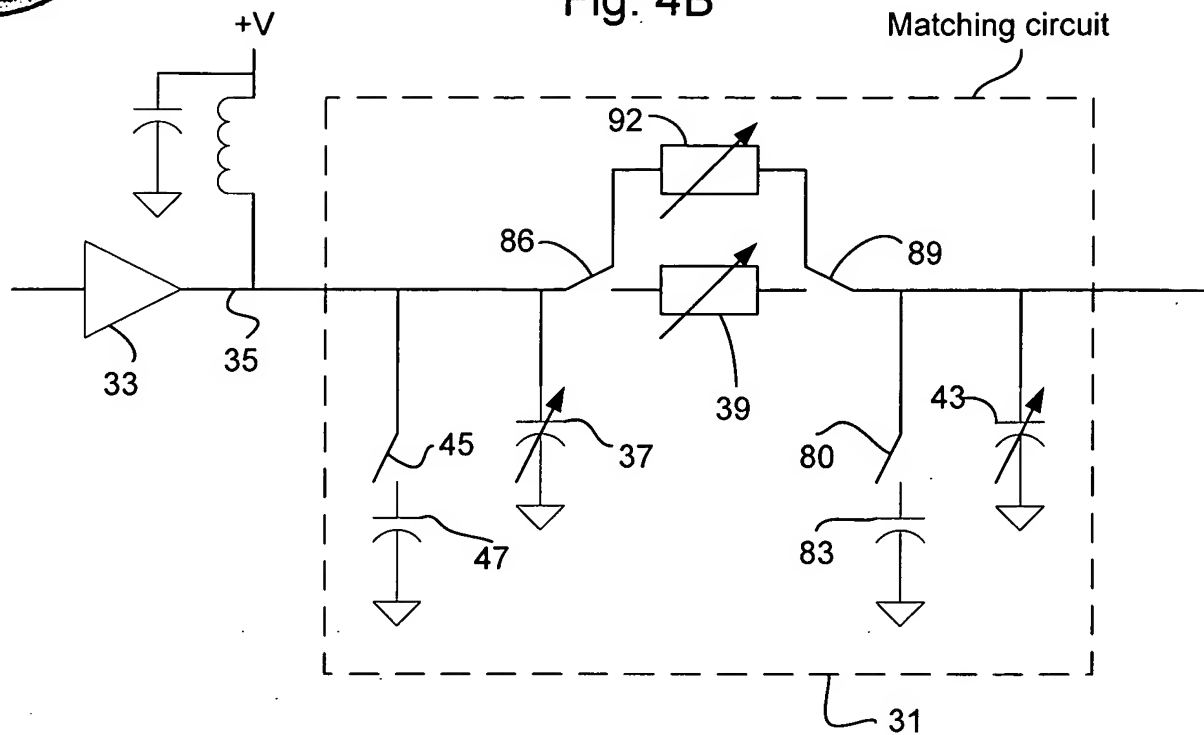


Fig. 4B



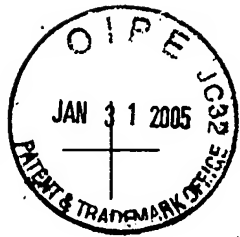
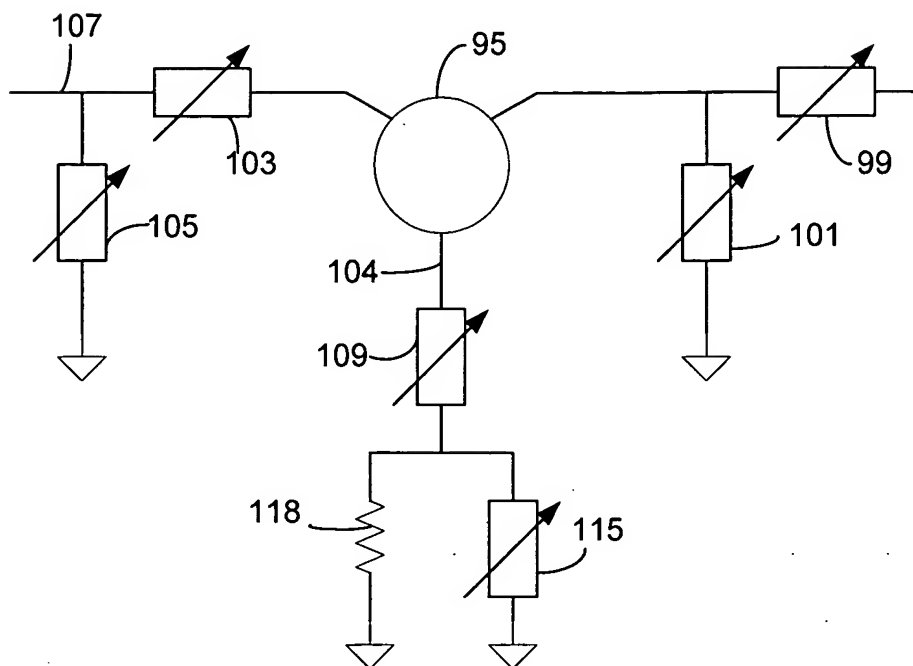
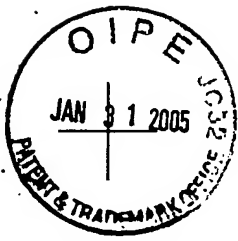


Fig. 5





## LNA Matching Circuit

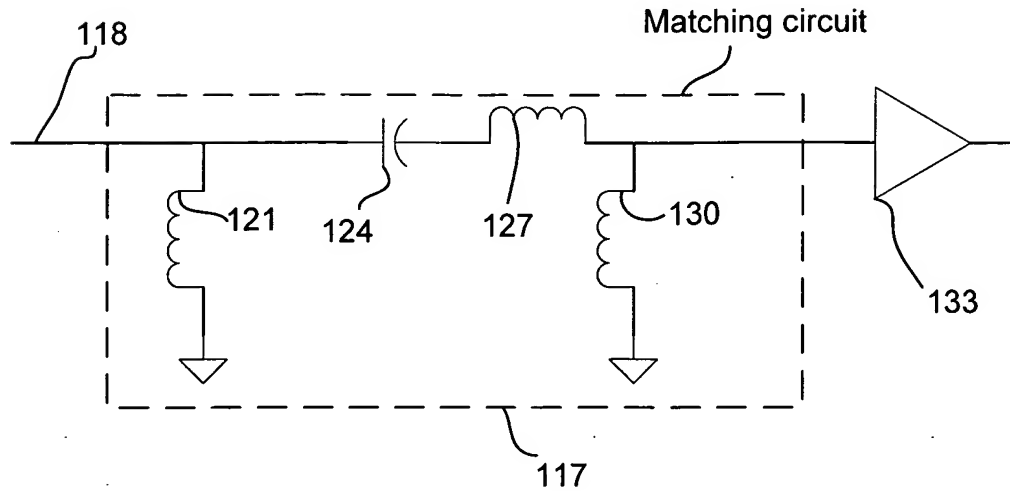


Fig. 6A



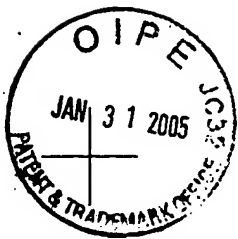
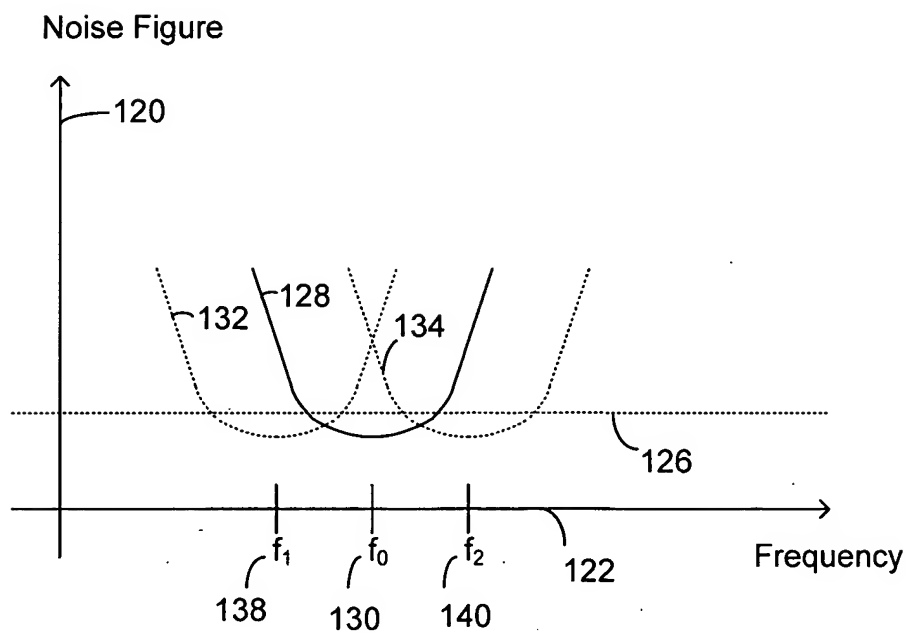


Fig. 6B







## Antenna Matching Circuit

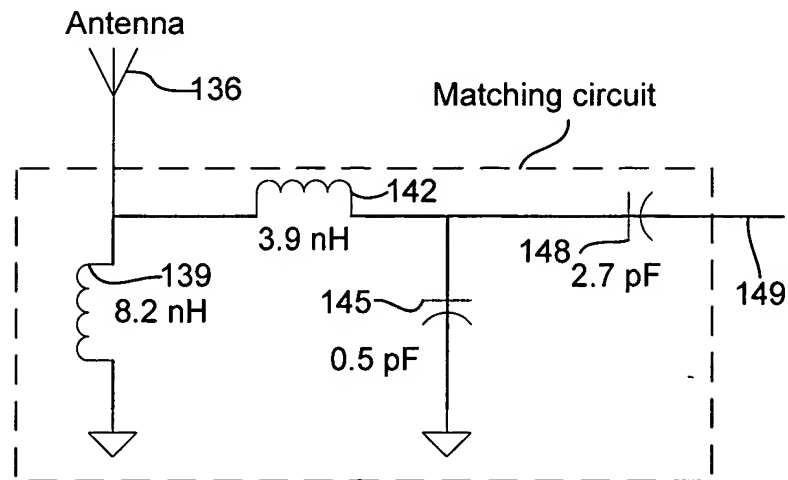
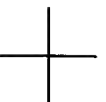


Fig. 7



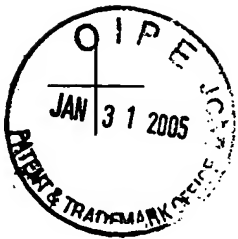
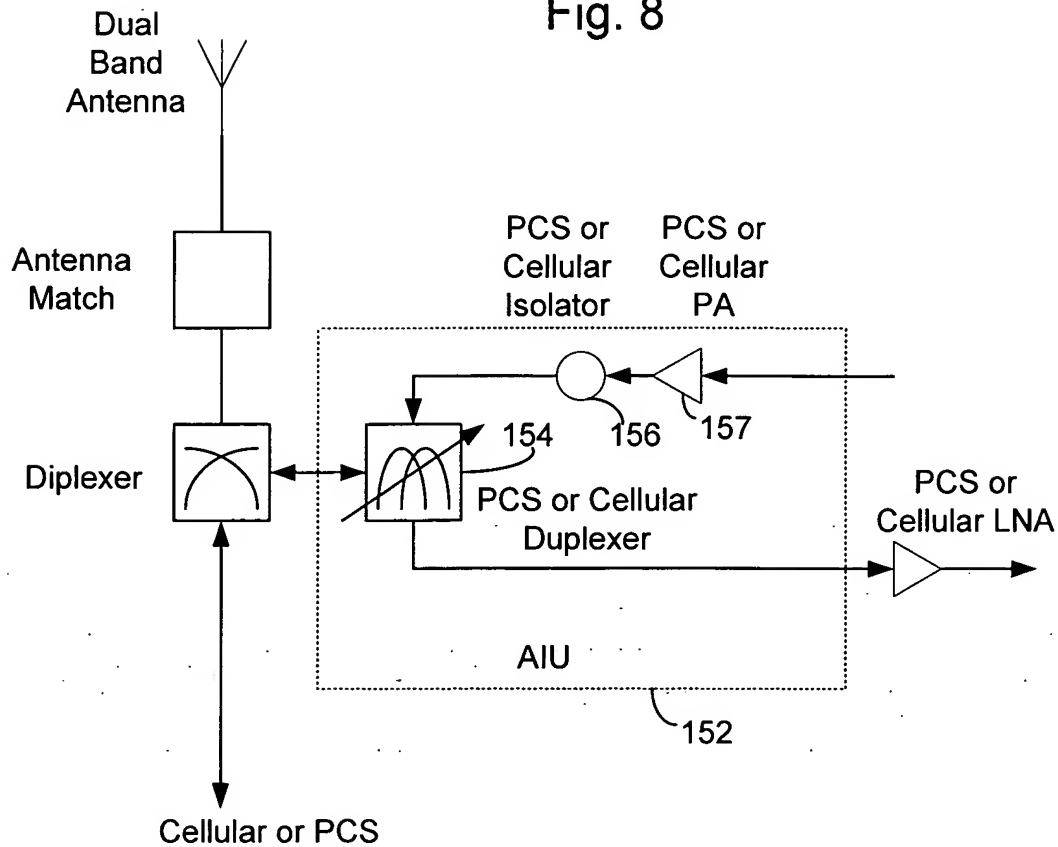


Fig. 8



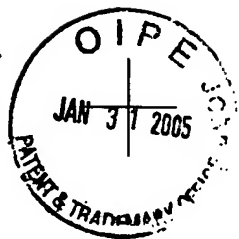
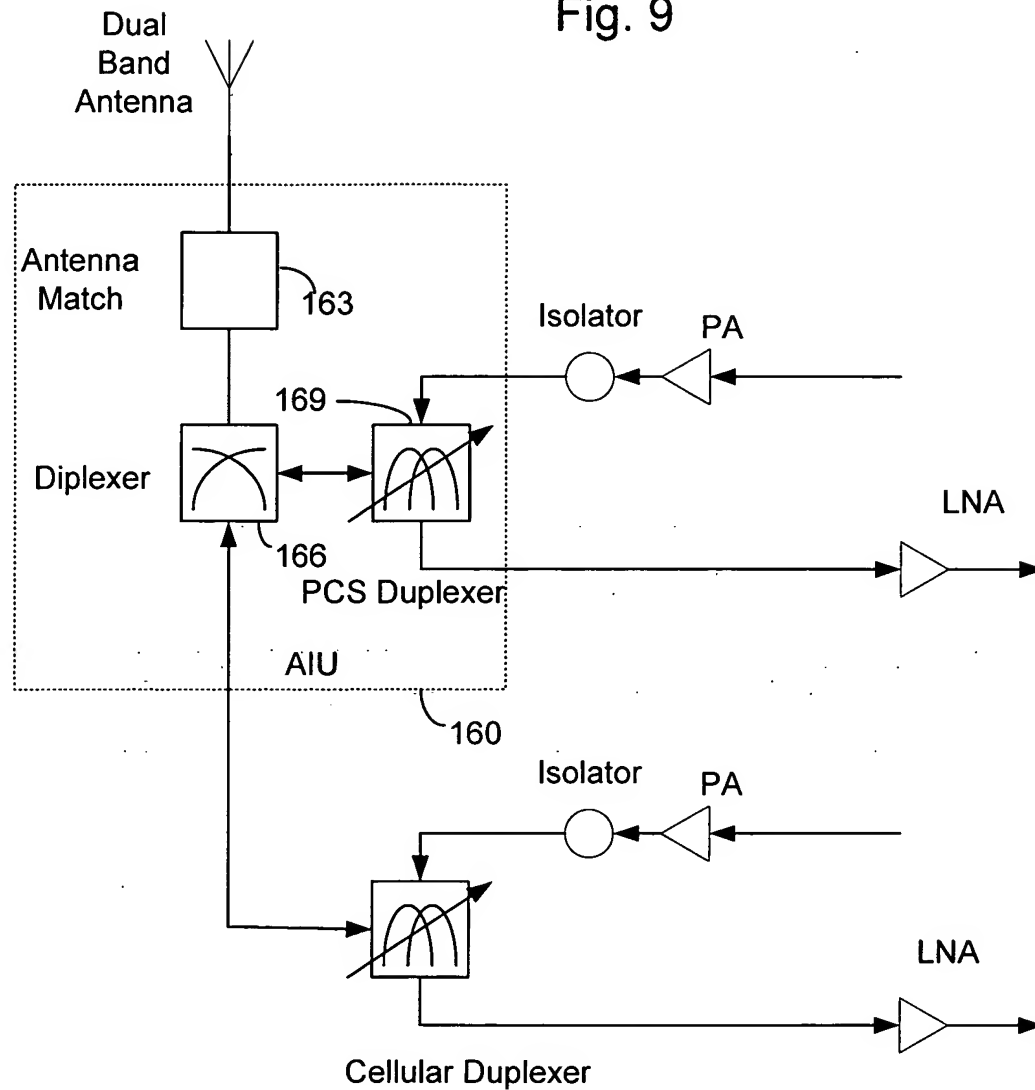


Fig. 9



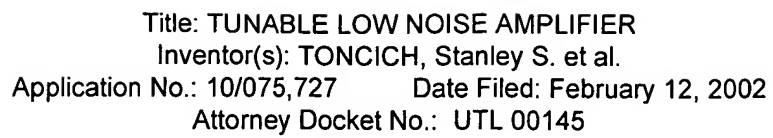


Fig. 10

Dual Band Antenna

Antenna Match

Diplexer

PCS Duplexer

Cellular Duplexer

Isolator

PA

LNA

AIU

175

178

181

184

172

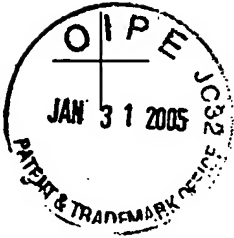
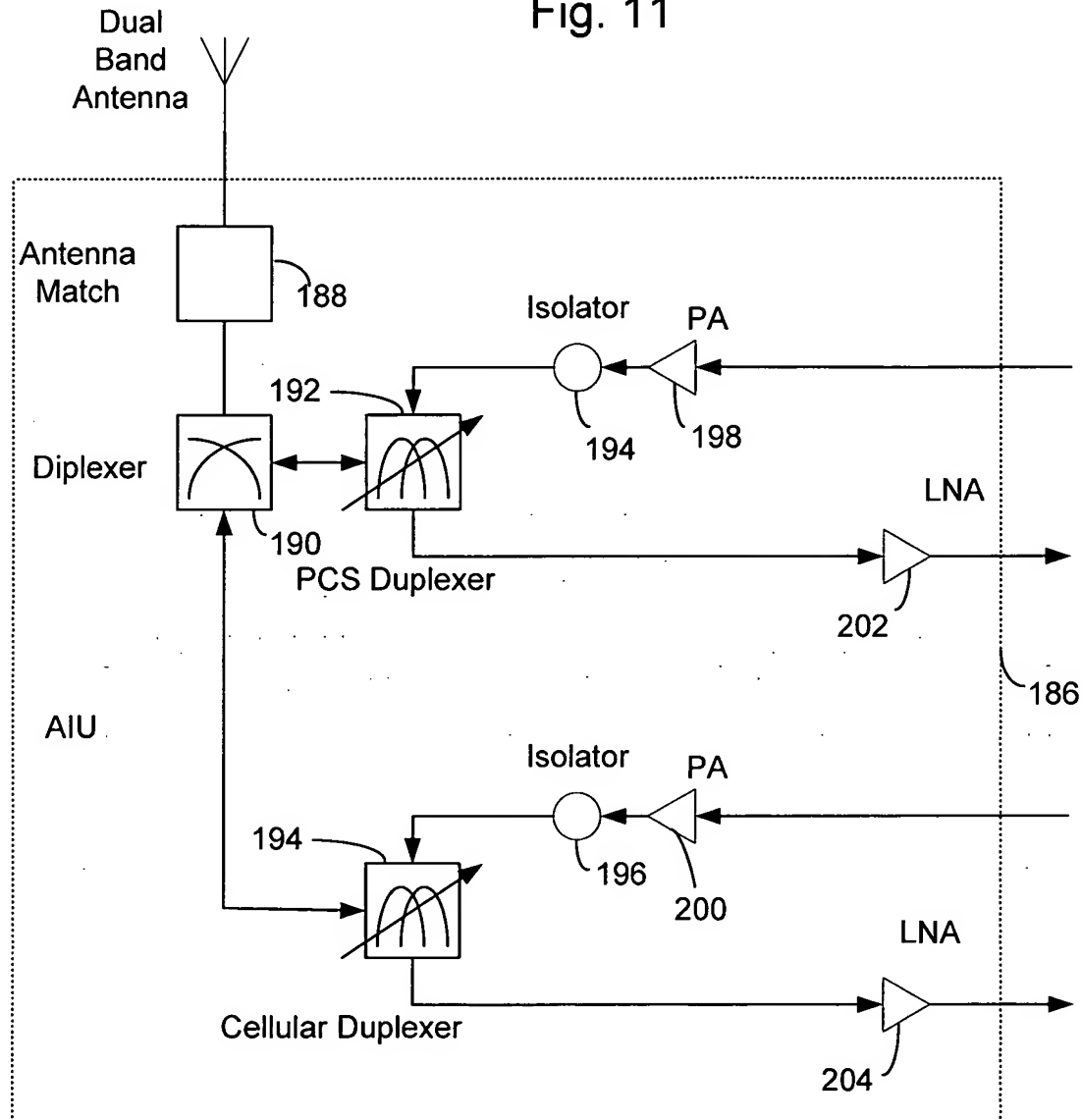


Fig. 11



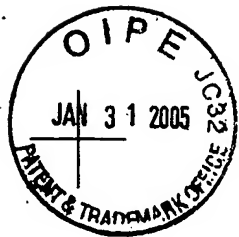


Fig. 12

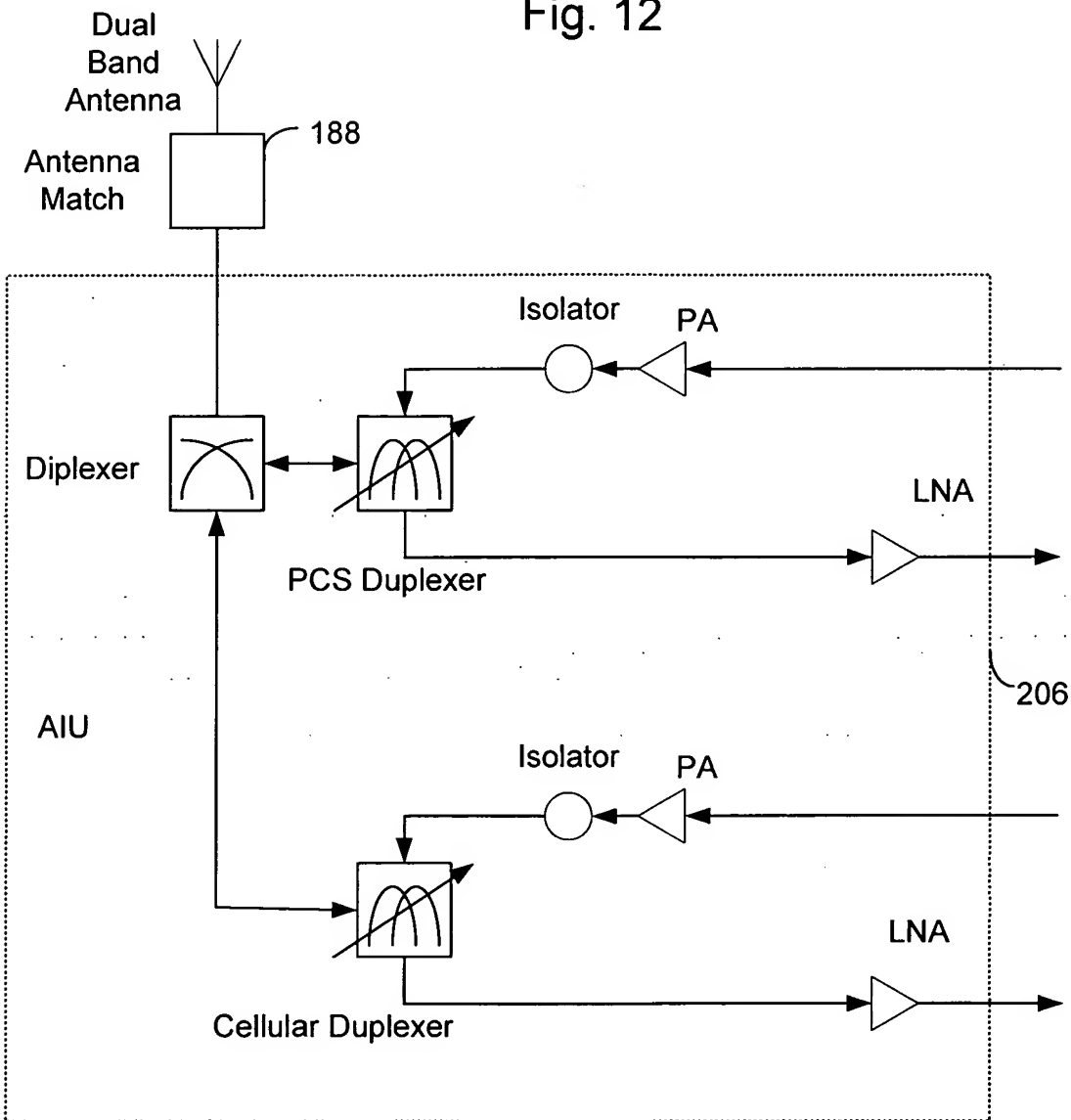




Fig. 13

